

ABSTRACT OF THE DISCLOSURE

Temporal processing for realtime human vision system behavioral modeling is added at the input of a spatial realtime human vision system behavioral modeling algorithm. The temporal processing includes a linear and a non-linear temporal filter in series in each of a reference channel and a test channel, the input to the reference channel being a reference image signal and the input to the test channel being a test image signal that is an impaired version of the reference image signal. The non-linear temporal filter emulates a process with neural attack and decay to compensate for a shift in peak sensitivity and for frequency doubling in a spatio-temporal sensitivity function. The linear temporal filter accounts for the remaining subtleties in the spatio-temporal sensitivity function.